ABSTRACT OF THE DISCLOSURE

The method for fabricating a semiconductor device including a step of forming a gate insulation film on a semiconductor substrate 10, the method further comprises, before the step of forming the gate insulation film, the step of forming an insulation film 12, covering a first side (upper side) and a second side (underside) of the semiconductor substrate 10, the step of etching off the insulation film 12 on the first side of the semiconductor substrate 10, and the step of annealing the semiconductor substrate 10 with the insulation film 12 present on the second side of the semiconductor substrate 10. The semiconductor film 12 on the second side of the semiconductor substrate 10 is removed, and the semiconductor substrate 10 is heat-treated with the insulation film 12 present on the second side of the semiconductor substrate 10, whereby even when the annealing is performed at high temperature, the sublimation of semiconductor constituent atoms from the second side of the semiconductor substrate 10 can be prevented. Accordingly, the adhesion of the semiconductor constituent atoms to the temperature sensor, etc. can be prevented, which permits semiconductor devices to be fabricated without complicated maintenance. Thus, semiconductor devices can be fabricated with high fabrication efficiency.